



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/516,913	06/03/2005	Serge Baumert	0512-1244	8630
465 7590 12/04/2008 YOUNG & THOMPSON 209 Madison Street Suite 500 ALEXANDRIA, VA 22314			EXAMINER LE, MARK T	
			ART UNIT 3617	PAPER NUMBER
			MAIL DATE 12/04/2008	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/516,913

**Applicant(s)**

BAUMERT ET AL.

**Examiner**

MARK T. LE

**Art Unit**

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10/28/08.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-2, 4-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 4-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-946)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This communication is responsive to the amendments filed on October 28, 2008. Applicant's amendments and remarks have been carefully considered.
2. Claims 1-2, 4-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kais (US 6,177,205) in view of Bhadeshia (US 5,879,474).

Kais discloses a stretch of rail comprising switch element 12 made of high alloy steel including manganese content of 10-20%, connected directly to the lengths of carbon steel rails 14,16 by welding without deposition of metal (see for example claim 1 of Kais patent). It is noted that Kais does not disclose the specific material composition of the carbon steel rails as recited in the instant claims.

Bhadeshia, column 3, second paragraph, describes bainitic steel rail without carbide; wherein, the steel rail having the material composition as recited in instant claims.

In view of Bhadeshia, it would have been obvious to one skilled in the art to use bainitic steel rails with material composition similar to that taught by Bhadeshia, in the structure of Kais so as to achieve expected advantages, such as higher structural integrity and enhanced weldability.

Regarding the instant claimed method of welding being in the form of flash welding and forging, as recited in instant claim 8, note that on the one hand, the instant claimed method of welding and forging does not present a patentable significant in an apparatus claim, i.e. claim 8; and on the other hand, flash butt welding and forging and electron-beam welding are known forms of welding as described in the first three

paragraphs of column 4 of Kais, and it would have been obvious to one skilled in the art to use either form of welding for forming the track of Kais so as to achieve the expected benefit of the selected form of welding.

Regarding the method step including no heat treatment, as recited in instant claim 9, note that the instant method step does not present a patentable significant in an apparatus claim, i.e. claim 9. Further, it would have been obvious to one skilled in the art avoid or remove an extra step, such as heat treatment, along with the expected benefit thereof in the structure of Kais because such benefit may not be critical or needed in certain light rail applications. On the other hand, the intermediate product before the heat treatment of Kais is readable as being without or no heat treatment.

Regarding the instant claimed hardness of the medium-alloy low-carbon steel, as recited in instant claim 11, consider the hardness of bainitic steel shown in the table on top of the last page of Bhadeshia, which includes hardness of 400 HV30 within the range of 350-390HB as claimed. Note that the length of rail of Kais, as modified above, is made from the bainitic steel having hardness similar to that of Bhadeshia.

3. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over the prior art as applied to claim 1 above, and further in view of the prior art described in the last six lines of page 3 of the instant specification.

Regarding the instant claimed switch element having hardness between 170 and 230HB, as recited in instant claim 10, it is noted that Kais does not disclose the specific hardness of the switch element. In the last six lines of page 3 of the instant specification, there is a switch element made of a material, which is similar to that of

Kais, that is well known under the name of HADFIELD and has hardness between 170 and 230 HB. Therefore, it would have been obvious to one skilled in the art to use a material having similar hardness to that of the prior art switch element described in the instant specification, for forming the switch element of Kais so as to achieve the expected structural integrity thereof.

4. The above grounds of rejection are considered to include examiner's responses, either directly/indirectly, to applicant's arguments.
5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **MARK T. LE** whose telephone number is (571)272-6682. The examiner can normally be reached on Mon-Fri, between 8:15-4:45 (Teleworking).

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Mark Le/  
Primary Examiner  
Art Unit 3617

mle  
12/3/08